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# A new species of *Derops* SHARP from Doi Inthanon, Thailand (Coleoptera, Staphylinidae, Tachyporinae) 43<sup>rd</sup> contribution to the knowledge of Staphylinidae

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A b s t r a c t: A new species of beetle, *Derops shuckburghae* spec. nova, from Doi Inthanon, Thailand, is described.

K e y words: Coleoptera, Staphylinidae, Tachyporinae, *Derops*, China, Thailand, Doi Inthanon.

#### Introduction

The genus *Derops* is one of a few Palaearctic genera of plants and animals that have a discontinuous range of distribution in North America and East Asia, resulting from fragmentation of the ancient tertiary fauna and flora (SMETANA 1983). *Derops* includes a single species from the eastern United States and twelve described species from east and south-east Asia (Russian Far East, Korea, Japan, China, Vietnam, Assam); several described and undescribed species have recently been discovered in mainland China (Sichuan, Shaanxi, Guangdong, Fujian, Zhejiang, Jiangsu, Jiangxi, Yunnan) and Taiwan.

The new species described below is of interest in that it is one of a number of genera of plants and animals of Palaearctic origin that in Thailand appear to be confined to the summit of Doi Inthanon, the highest mountain in the country. This remarkable locality is the most southerly one yet known for the genus.

Units of measurement, other than those given in mm, were obtained by measuring with an eye-piece micrometer at  $\times$  80 magnification, and are therefore equal to 12.5  $\mu$ .

# Derops shuckburghae spec. nova

Holotype (3) 2 Paratypes (3, 0): THAILAND, Chiang Mai Province, Doi Inthanon, ca. 2200 m, 15.III.1982, G. de Rougemont (in the author's collection, eventually to be deposited in the Natural History Museum, London).

Length: 5.8 - 6 mm. Body deep black, shiny; antennae and tarsi dark brown or fuscous; labrum, mandibles and palpi reddish brown. Pubescence pale, fine, erect.

Proportions of Holotype: length of head: 43; breadth of head: 66; diameter of eye: 26; antennomeres: I: 17; II: 15; III: 20; IV: 20; V: 22; VI: 22; VII: 21; VIII: 19; IX: 20; X: 19; XI: 23; length of pronotum: 71; maximum breadth of pronotum: 75; breadth of

pronotum at apico-lateral angles: 52; maximum length of elytron: 122; breadth of elytra: 102. Head (plate 1, fig. 3) transverse, vertex and frons depressed, the basal area with two broad foveate depressions. Puncturation coarse, the diameter of punctures greater than that of eye-facets, deep, sub-rugose, but interstices shiny. Eyes large, their diameter at least as long as temples. Antennae long but not reaching posterior margin of elytra, with antennomeres I-X all obconical. Pronotum distinctly transverse, very strongly cordiform, narrowed to nearly 2/3rds its maximum breadth at posterior angles, with a longitudinal depression in antero-median area. Punctures of disc about equal in diameter and density to those of head, but shallower, the interstices rounded and more shiny; puncturation of prominent antero-lateral parts much finer and very sparse, the surface very shiny. Elytra (plate 1, fig. 4) large, parallel-sided, with a short juxta-sutural depression behind large scutellum; puncturation strongly asperate, relatively very sparse, the interstices mostly 2 to 3 times greater than diameter of punctures, the integument very shiny. Abdominal tergites almost devoid of punctures in anterior transverse depressions, elsewhere very finely and moderately densely punctate; paratergites with much coarser and sparser puncturation; first visible tergite (tergite III) with a pair of very evident transverse pale tomentose patches only narrowly separate at median axis.

Male (habitus: plate 1, fig. 2): abdominal sternites VII and VIII as in plate 2, figs. 1 and 3; sternite VII with a group of 6-7 short stout black setae posteriorly on either side of the middle, and a group of 6 long spicules on each side on the posterior margin (many spicules broken off on paratype illustrated in fig. 1); sternite VII with one pair, sternite VIII with two pairs of very long setae. Tergite VIII (plate 2 fig. 5) with a single pair of long stout setae. Aedeagus (plate 2 fig. 4): the ventral blade is much longer than the median lobe, flat and thin, very slightly asymmetrical, without a ventral median keel.

Female (habitus: plate 1, fig. 1): the abdominal tergite VIII (plate 2, fig. 8) deeply emarginate, with a single pair of long setae; abdominal sternite VIII (plate 2, fig. 6) with an apical fringe of 14 relatively short, coppery red setae, and two pairs of long black setae.

Recognition: until the recent discovery and description (2000) of *Derops nitidipennis* Schülke from Shaanxi Province, China, the insect described here as *Derops shuckburghae* spec. nova was easily distinguished, even with the naked eye, from all other *Derops* species by its relatively very sparse puncturation and shiny dorsal surfaces, especially of the elytra. *D. nitidipennis* and several other undescribed forms recently found in China have the same type of sparse puncturation. In comparison with *D. nitidipennis*, *D. shuckburghae* is a little smaller, the eyes are larger, their diameter at least twice the length as temples (only 1.5 - 1.7 times as long as temples in *D. nitidipennis*), the pronotum is smaller and relatively narrower (ratio of width of pronotum / head: 1.12 - 1.18, in *D nitidipennis* 1.23 - 1.33), its puncturation slightly coarser. The elytra are broader in relation to the pronotum (ratio of width of pronotum/elytra: 1.35 - 1.41, in *D. nitidipennis* 1.61 - 1.69), and broader in relation to their length (ratio 1.75 - 1.78, in *D. nitidipennis* 1.61 - 1.69), and their punctures smaller and sparser.

The male of *D. nitidipennis* remains unknown. The female tergite VIII differs from that of *D. nitidipennis* in being less deeply emarginate, the lateral lobes broader and less acutely narrowed apically. *D. shuckburghae* spec. nova appears to be more closely related to an undescribed species from Jiangxi province in coll. Schülke, which has identical male secondary characters (sternite VIII, plate 2, fig. 2), but a slightly different outline of

the ventral blade of the aedeagus (plate 2, fig. 7). The diagnostic differences between the two species are given by Schülke (in press) in the description of the new Chinese species.

Bionomics: Like other *Derops* this species is hygrophilous. The insects were found moving sluggishly on very wet rocks at a point where underground water resurges at the foot of and in the spray zone of a waterfall.

Derivation of specific name: The new species is dedicated to Sarah Shuckburgh, in memory of our journeys in Malaysia and China.

## Acknowledgements

I am indebted to our colleague, the specialist in Tachyporinae Michael Schülke, for his generous contribution to this paper, in examining my specimens, sending me the diagnostic comparison of this new species with *D. nitidipennis* SCHÜLKE, and producing and allowing me to use the plates of illustrations for this paper.

# Zusammenfassung

Eine neue Art aus der Familie Staphylinidae, *Derops shuckburghae* spec. nova aus Thailand, wurde beschrieben.

### References

- CAMERON M. (1930): The Fauna of British India. Coleoptera Staphylinidae 1 Taylor & Francis, London, 471 pp.
- SCHÜLKE M. (1999): A new species of *Derops* SHARP from China (Coleoptera, Staphylinidae, Tachyporinae). Linzer biologische Beiträge 31/1: 345-350.
- SCHÜLKE M. (2000): Eine weitere Art der Gattung *Derops* SHARP aus China (Coleoptera, Stapylinidae, Tachyporinae) Linzer biologische Beiträge 32/2: 913-916.
- SMETANA A. (1983): The status of the staphylinid genera *Derops* SHARP and *Rimunicola* SANDERSON (Coleoptera) Entomologica scandinavica 14/3: 269-279.
- SMETANA A. (1995): A new species of the genus *Derops* SHARP, 1889 from Taiwan (Coleorptera, Staphylinidae, Tachyporinae, Deropini) Fabreries 20/3: 99-104.
- WATANABE Y. (1969): Results of the speleological survey in South Korea 1966. XVIII. Staphylinid beetles found in the limestone caves of South Korea Bulletin of the Natural Science Museum 12/3: 623-631.
- WATANABE Y. (1985): A Revision of the Japanese Species of *Derops* (Coleoptera, Staphylinidae) Kontyû 53/3: 436-451.
- WATANABE Y. (1993): A New Species of the Genus *Derops* (Coleoptera Staphylinidae) from the Russian Far East Japanese Journal of Entomology 61/3: 557-561.
- WATANABE Y. (1996): A New Species of the Genus *Derops* (Coleoptera Staphylinidae) from Northern Vietnam Japanese Journal of Entomology 64/1: 145-149.

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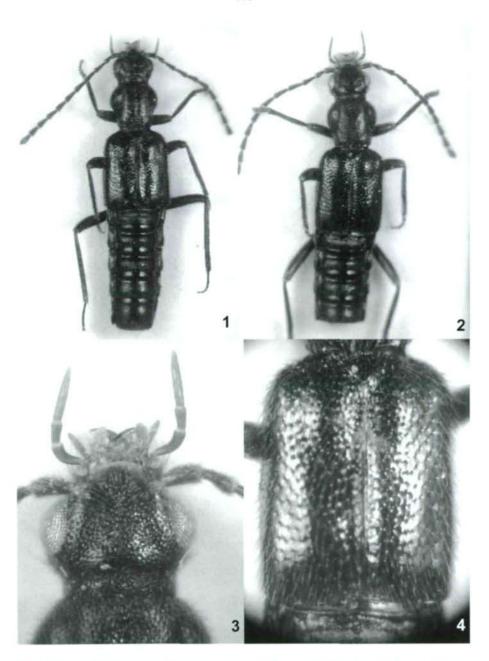


Plate 1 (figs 1-4): Derops shuckburghae spec. nova.  $1-\varphi$ , paratype, habitus;  $2-\delta$ , paratype, habitus;  $3-\delta$ , paratype, head;  $4-\varphi$ , paratype, elytra.

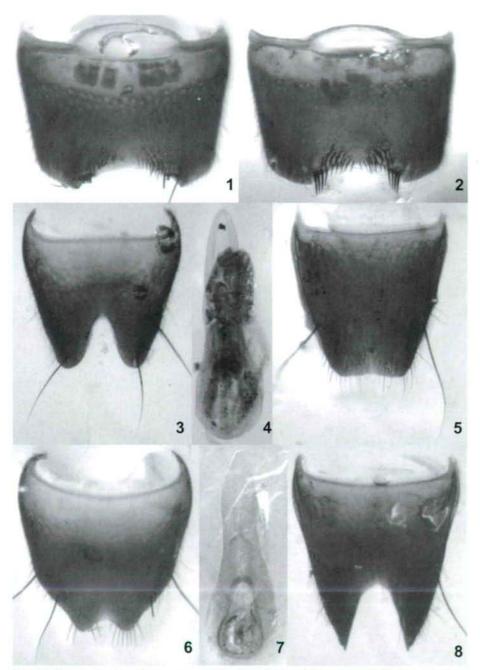


Plate 2: Derops shuckburghae spec. nova (figs. 1, 3-6, 8) and Derops undescribed species from Jiangxi (figs. 2, 7).  $1-\delta$ , paratype, sternite VII;  $2-\delta$ , sternite VII;  $3-\delta$ , paratype, sternite VIII;  $4-\delta$ , paratype, aedeagus;  $5-\delta$ , paratype, tergite VIII;  $6-\varphi$ , paratype: sternite VIII; 7- aedeagus;  $8-\varphi$ , paratype, tergite VIII.